

Jordan A. Taylor

Curriculum Vitae

December 2022

Contact Information

Department of Psychology
Princeton University
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Academic Appointments

Associate Professor Department of Psychology, Princeton University	2018-
Associated Faculty Princeton Neuroscience Institute, Princeton University	2013-
Assistant Professor Department of Psychology, Princeton University	2012-2018
Postdoctoral Fellow Department of Psychology, University of California, Berkeley	2008-2012

Education

Ph.D.	Washington University in St. Louis, Biomedical Engineering	2007
M.S.	Washington University in St. Louis, Biomedical Engineering	2006
B.S.	Purdue University, Aeronautical and Astronautical Engineering	2003

Research Grants

J. Insley Blair Pyne Fund (E3456) SEAS Innovation Research Princeton University Title: Making virtual reality meet perception: Harnessing the potential of VR applications for research and industry (Role: PI)	2021-2023
New Jersey Alliance for Clinical and Translational Science (TR003017) Rutgers and Princeton University Title: A dynamic functional splint to restore hand function in children with cerebral palsy (Role: Co-PI)	2020-2022
Department of Defense (N00014-18-1-2873) Office of Naval Research, Science and Technology Title: Structured deep learning for modeling and controlling high-dimensional dynamical systems (Role: Co-PI)	2018-2023

National Science Foundation (1827550) Division of Behavioral and Cognitive Sciences Perception, Action, and Cognition Title: The intertwined roles of vision and sensorimotor adaptation on reach-to-grasp movements: redefining the functional differences between perception and action (Role: Co-PI)	2018-2022
National Science Foundation (1838462) Division of Behavioral and Cognitive Sciences Science of Learning Title: An exploration of a psychological space for human motor generalization between perception and action (Role: PI)	2018-2021
National Institutes of Health (5R01NS092079) National Institute of Neurological Disorders and Stroke Title: Embodied decision making: the influence of action errors on reinforcement learning (Role: Co-I)	2015-2021
Princeton University, Princeton Neuroscience Institute Princeton Neuroscience Innovation Fund Title: Identification and modulation of neural regions associated with implicit and explicit learning (Role: PI)	2014-2016
National Institutes of Health (5R01NS084948) National Institute of Neurological Disorders and Stroke Title: A model system to study the interaction of multiple processes for motor learning (Role: PI)	2013-2019
National Institute of Neurological Disorders and Stroke (F32NS064749) Title: Neural correlates of strategic control and recalibration during motor learning (Role: PI)	2009-2012

Awards & Fellowships

Lawrence S. Brodie University Preceptorship in Psychology Princeton University	2015-2018
National Research Service Award, National Institutes of Health	2014-2016
The Society for the Neural Control of Movement Scholarship	2007, 2011
Advances in Computational Motor Control Travel Award	2007, 2011
School of Dendrites Travel Award, Institute of Advanced Studies The Hebrew University of Jerusalem	2005
Cognitive, Computational, Systems Neuroscience Fellowship McDonnell Higher Brain Center, Washington University	2004
Orla K. Harlan Scholarship, Purdue University	2001

Publications

57. McDougle S.D., Tsay J., Pitt B., King M., Saban W., Taylor, J.A., & Ivry, R.B. (2022). Continuous manipulation of mental representations is compromised in cerebellar degeneration. *Brain*, 145(12):4246-4263.
56. Avraham G., Taylor J.A., Breaks A., Ivry R.B., & McDougle, S.D. (2022). Contextual effects in sensorimotor adaptation adhere to associative learning rules. *eLife*, 11:e75801.
55. Mushtaq F., McDougle, S.D., Craddock, M.P., Parvin, D.E., Brookes, J., Schaefer, A., Mon-Williams, M., Taylor, J.A., & Ivry, R.B. (2022). Distinct processing of selection and execution errors in neural signatures of outcome monitoring. *Journal of Cognitive Neuroscience*, 34(5):748-765.
54. McDougle, S.D., Wilterson, S.A., Turk-Browne, N.B., & Taylor, J.A. (2022). Revisiting the role of the medial temporal lobe in motor learning. *Journal of Cognitive Neuroscience*, 34(3):532-549.
53. Wang T., & Taylor J.A. (2021). Implicit adaptation to mirror reversal is in the correct coordinate system but the wrong direction. *The Journal of Neurophysiology*, 126(4):1478-1489.
52. Forano M., Schween R., Taylor J.A., Hegele M., & Frankin D.W. (2021). Direct and indirect cues can enable dual-adaptation, but through different learning processes. *The Journal of Neurophysiology*, 126(5):1490-1506.
51. Wilterson S.A., & Taylor J.A. (2021). Implicit visuomotor adaptation remains limited after several days of training. *eNeuro*, 8(4).
50. Campagnoli C., Domini F., & Taylor J.A. (2021). Taking aim at the perceptual side of motor learning: exploring how explicit and implicit learning encode perceptual error information through depth vision. *The Journal of Neurophysiology*, 126(2): 413-426.
49. Cesanek E., Taylor J.A., & Domini F. (2021). Persistent grasping errors produce depth cue re-weighting in perception. *Vision Research*, 178:1-11.
48. Taylor J.A., & McDougle S.D. (2020). Visuomotor adaptation tasks as a window into the interplay between explicit and implicit cognitive processes. In Poeppel D., Mangun G.R., & Gazzaniga M.S. (Eds.), *The Cognitive Neurosciences 6th Edition* (pp. 549-557). MIT Press.
47. Schween R., McDougle S.D., Hegele M., & Taylor J.A. (2020). Assessing explicit strategies in force field adaptation. *The Journal of Neurophysiology*, 123(4): 1552-1565.
46. Cesanek E., Taylor J.A., & Domini F. (2020). Sensorimotor adaptation and cue reweighing compensate for distorted 3D shape information, accounting for paradoxical perception-action dissociation. *The Journal of Neurophysiology*, 123(4): 1407-1419.
45. Schween R., Langsdorf L.M., Taylor J.A., & Hegele M. (2019). How different effectors and action effects modulate the formation of separate motor memories. *Scientific Reports*, 9(1):17040.

44. Poh E., & Taylor J.A. (2019). Generalization via superposition: Combined effects of mixed reference frame representations for explicit and implicit learning in a visuomotor adaptation task. *The Journal of Neurophysiology*, 121:1953-1966.
43. McDougle S.D., Butcher P.A., Parvin D., Mustaq F., Niv Y., Ivry R.B., & Taylor J.A. (2019). Neural signatures of prediction errors in a decision-making task are modulated by action execution failures. *Current Biology*, 29:1-8.
42. Wong A.L., Marvel C.L., Taylor J.A., & Krakauer J.W. (2019). Can patients with cerebellar disease switch learning mechanisms to reduce their adaptation deficits? *Brain*, 142:662-673.
41. McDougle S.D., & Taylor, J.A. (2019). Dissociable cognitive strategies for sensorimotor learning. *Nature Communications*, 10(1):40.
40. Hutter S.A., & Taylor J.A. (2018). Relative sensitivity of explicit re-aiming and implicit motor adaptation. *Journal of Neurophysiology*, 120:2640-2648.
39. Schween R., Taylor J.A., & Hegele M. (2018). Plan-based generalization shapes local implicit adaptation to opposing visuomotor transformations. *Journal of Neurophysiology*, 120:2775-2787.
38. Liew S.L., Thompson T., Ramirez J., Butcher P.A., Taylor J.A., & Celnik P.A. (2018). Variable neural contributions to explicit and implicit learning during visuomotor adaptation. *Frontiers in Neuroscience*, 12:610.
37. Parvin D., McDougle S.D., Taylor J.A., & Ivry R.B. (2018). Credit assignment in a motor decision making task is influenced by agency and not sensorimotor prediction errors. *The Journal of Neuroscience*, 38(19):4521-4530.
36. Butcher P.A., & Taylor J.A. (2018). Decomposition of a sensory-prediction error signal for visuomotor adaptation. *Journal of Experimental Psychology: Human Perception and Performance*, 44(2):175-194.
35. Cesanek E., Campagnoli C., Taylor J.A., & Domini F. (2018). Does visuomotor adaptation contribute to illusion-resistant grasping. *Psychonomic Bulletin & Review*, 25(2):827-845.
34. Bond K.M., & Taylor J.A. (2017). Structural learning in a visuomotor adaptation task is explicitly accessible. *eNeuro*, 4(4).
33. Butcher P.A., Ivry R.B., Kuo S.H., Rydz D., Krakauer J.W., & Taylor J.A. (2017). The cerebellum does more than sensory-prediction error-based learning in sensorimotor adaptation tasks. *Journal of Neurophysiology*, 118(3):1622-1636.
32. McDougle S.D., Bond K.M., & Taylor J.A. (2017). Implications of plan-based generalization in sensorimotor adaptation. *Journal of Neurophysiology*, 118(1): 383-393.
31. Morehead J.R., Taylor J.A., Parvin D., & Ivry R.B. (2017). Characteristics of implicit sensorimotor adaptation revealed by task-irrelevant clamped feedback. *Journal of Cognitive Neuroscience*, 29(6):1061-1074.
30. Stark-Inbar A., Mehr R., Taylor J.A., & Ivry R.B. (2017). Individual differences in implicit motor learning. *Journal of Neurophysiology*, 117(1):412-428.

29. Poh E., Carroll T.J., & Taylor J.A. (2016). Effect of coordinate frame compatibility on the transfer of implicit and explicit learning across limbs. *Journal of Neurophysiology*, 116(3):1239-1249.
28. McDougle S.D., Ivry R.B., & Taylor J.A. (2016). Taking aim at the cognitive side of learning in sensorimotor adaptation tasks. *Trends in Cognitive Sciences*, 20(7): 535-544.
27. McDougle S.D., Boggess M.J., Crossley M.J., Parvin D., Ivry R.B., & Taylor J.A. (2016). Credit assignment in movement-dependent reinforcement learning. *Proceedings of the National Academy of Sciences*, 113(24):6797-6802.
26. Day K.A., Roemmich R.T., Taylor J.A., & Bastian A.J. (2016). Motor learning generalizes around the intended movement. *eNeuro*, 3(2) e0005-16.2016, 1-12.
25. Brudner S.N., Kethidi N., Graeupner D., Ivry R.B., & Taylor J.A. (2016). Delayed feedback during sensorimotor learning selectively disrupts adaptation, but not strategy use. *Journal of Neurophysiology*, 115(3):1499-1511.
24. Fan J.E., Turk-Browne N.B., & Taylor J.A. (2016). Error driven learning in statistical summary perception. *Journal of Experimental Psychology: Human Perception and Performance*, 42(2):266-280.
23. McDougle S.D., Bond K.M., & Taylor J.A. (2015). Explicit and implicit processes constitute the fast and slow processes of sensorimotor learning. *The Journal of Neuroscience*, 35(26):9568-9579.
22. Bond K.M., & Taylor J.A. (2015). Flexible explicit learning, but rigid implicit learning in sensorimotor learning tasks. *Journal of Neurophysiology*, 113(10): 3836-3849.
21. Taylor J.A., Krakauer J.W., & Ivry R.B. (2014). Explicit and implicit contributions to learning in a sensorimotor adaptation task. *The Journal of Neuroscience*, 34(8): 3023-3032.
20. Taylor J.A., & Ivry R.B. (2014). Cerebellar and prefrontal cortex contributions to adaptation, strategies, and reinforcement learning. *Progress in Brain Research: Cerebellum and Memory Formation: Structure, Computation, and Function*, 210: 217-253.
19. Taylor J.A., & Ivry R.B. (2013). Context-dependent Generalization. *Frontiers in Human Neuroscience*, 7:171.
18. Taylor J.A., & Ivry R.B. (2013). Implicit and explicit processes in motor learning. In W. Prinz, M. Beisert, A. Herwig (Eds.). *Action Science: Foundations of an Emerging Discipline* (pp. 63-87). Cambridge, MA: MIT Press.
17. Taylor J.A., Hieber L.L., & Ivry R.B. (2013). Feedback-dependent generalization. *Journal of Neurophysiology*, 109(1):202-215.
16. Fan J.E., Turk-Browne N.B., & Taylor J.A. (2013). Feedback driven tuning of statistical summary representations. *Visual Cognition*, 21(6):685-689.
15. Taylor J.A., & Ivry R.B. (2012). The role of strategies in motor learning. *Annals of the New York Academy of Sciences, The Year in Cognitive Neuroscience*, 1251:1-12.

14. Taylor J.A., Wojaczynski G.J., & Ivry R.B. (2011). Trial-by-trial analysis of intermanual transfer of adaptation. *Journal of Neurophysiology*, 106(6): 3157-3172.
13. Prinzmetal W., Taylor J.A., Myers L.B., & Nguyen-Espino J. (2011). Contingent capture and inhibition of return: a comparison of mechanisms. *Experimental Brain Research*, 214(1):47–60.
12. Norris S.A., Hathaway E., Taylor J.A., & Thach W.T. (2011). Cerebellar inactivation impairs memory of learned prism gaze-reach calibrations. *The Journal of Neurophysiology*, 105,2248-2259.
11. Morehead J.R., Butcher P.A., & Taylor J.A. (2011). Does fast learning depend on declarative mechanisms? *The Journal of Neuroscience*, 31(14):5184-5185.
10. Taylor J.A., & Ivry R.B. (2011). Flexible strategies during motor learning. *PLoS Computational Biology*, 7(3):e10001096.
9. Stoloff R.H., Taylor J.A., Xu J, Ridderikhoff A., & Ivry R.B. (2011). Effect of reinforcement history on hand choice in an unconstrained reaching task. *Frontiers in Neuroscience*, 5:41.
8. Taylor J.A., Klemfuss N.M., & Ivry R.B. (2010). An explicit strategy prevails when the cerebellum fails to compute movement errors. *Cerebellum*, 9(4):580-6.
7. Reid E.K., Norris S.A., Taylor J.A., Hathaway E.N., Smith A.J., Yittri E.A., & Thach W.T. (2010). Is the parvocellular red nucleus involved in cerebellar motor learning? *Current Trends in Neurology*, 3:15-22.
6. Wang X., Xu R., Abernathey G., Taylor J.A., Alzghoul M.G., Hannon K., Hockerman G.H., & Pond A.L. (2008). Kv11.1 channel subunit composition included MinK and varies developmentally in mouse cardiac muscle. *Developmental Dynamics*, 237(9):2430-7.
5. Taylor J.A., & Thoroughman K.A. (2008). Motor adaptation scaled by the difficulty of secondary cognitive task. *PLoS ONE*, 3(6):e2485.
4. Taylor J.A., & Thoroughman K.A. (2007). Divided attention impairs motor adaptation but not feedback control. *Journal of Neurophysiology*, 98(1):317-32.
3. Thoroughman K.A., Fine M.S., & Taylor J.A. (2007). Trial-by-trial motor adaptation: window into elemental neural computation. *Progress in Brain Research*, 165: 373-382.
2. Thoroughman K.A. & Taylor J.A. (2005). Rapid reshaping of human motor generalization. *The Journal of Neuroscience*, 25(39):8948-895.
1. Taylor J.A., Babbs C.F., Alzghoul M.B., Olsen A., Latour M., Pond A.L., & Hannon K (2004). Optimization of ectopic gene expression in skeletal muscle through DNA transfer by electroporation. *BMC Biotechnology*, 4:11.

Conference Proceedings

- Campagnoli C., & Taylor J.A. (2019). Specific visual features of a novel tool specify different physics priors. *Perception*, 48:162.

- Campagnoli C., & Taylor J.A. (2019). Visuomotor adaptation is influenced by perceived depth. *Perception*, 48:117.
- Campagnoli C., & Taylor J.A. (2018). Visuomotor adaptation is sensitive to perceptual changes in depth information. *Journal of Vision*, 18(10): 61.
- McDougle S.D., & Taylor J.A. (2016). Mental rotation as a behavioral and neural model of explicit aiming during visuomotor learning. *Advances in Motor Control and Motor Learning 2016*.
- Butcher P.A., Krakauer J.W., Kuo S.H., Rydz D., Ivry R.B., & Taylor J.A. (2014). Cerebellar degeneration disrupts adaptation and strategy use in sensorimotor learning. *Advances in Translational and Computational Motor Control 2014*.
- Morehead J.R., Taylor J.A., Parvin D., Marrone E., & Ivry R.B. (2014). Implicit adaptation via visual error clamp. *Advances in Translational and Computational Motor Control 2014*.
- Taylor J.A., Krakauer J.W., & Ivry R.B. (2012). Multiple learning processes operate continuously throughout learning. *Advances in Computational Motor Control XI*.
- Taylor J.A., & Ivry R.B. (2011). Feedback-dependent generalization of visuomotor adaptation. *Advances in Computational Motor Control X*.
- Taylor J.A., Ghorayshi A., & Ivry R.B. (2009). The Cost of Strategic Control: Attenuation of Adaptation. *Advances in Computational Motor Control VIII*.
- Taylor J.A., & Thoroughman K.A. (2007). Divided attention during motor memory formation affects specifically fast adaptive processes and alters mid-movement feedback control. *Advances in Computational Motor Control VI*.
- Thoroughman K.A., & Taylor J.A. (2004). Experience-dependent adaptation of the spatial generalization of human motor adaptation. *Advances in Computational Motor III*.

Conference Presentations (Last Five Years)

- Kim O.A., Velazquez C., & Taylor J.A. (November 2022). Mental rotation incurs a cognitive cost during a visuomotor reaching task. *The Society for Neuroscience Annual Meeting*. San Diego, CA.
- Schween R., Franklin D.W., Taylor J.A., Schweighofer N., & Endres D. (November 2022). Context-dependent sensorimotor learning by variational inference. *Advances in Motor Learning Symposium*, Enschede, The Netherlands.
- Kim O.A., Velazquez C., & Taylor J.A. (July 2022). Mental rotation incurs a cognitive cost during a visuomotor reaching task. *The Society for the Neural Control Movement Annual Meeting*, Dublin, Ireland.
- Velazquez C., & Taylor J.A. (July 2022). Effects of training variability on the use of flexible sensorimotor mappings. *The Society for the Neural Control Movement Annual Meeting*, Dublin, Ireland.
- Schween R., Franklin D.W., Taylor J.A., Schweighofer N., & Endres D. (July 2022) Context-dependent sensorimotor learning by variational inference. *The Society for the Neural Control Movement Annual Meeting*, Dublin.

- Campagnoli C., & Taylor, J.A. (April 2021). Active exploration of the input-output properties of a novel object improves system identification. *The Society for the Neural Control Movement Annual Meeting*. Virtual.
- Poh E., Al-Fawakhiri N., Tam R., Taylor J.A., & McDougle S.D. (April 2021). Generalization of motor learning in a psychological space. *The Society for the Neural Control Movement Annual Meeting*. Virtual.
- Vargas C., & Taylor J.A. (April 2021). Learning and retrieving models of *de novo* skills. *The Society for the Neural Control Movement Annual Meeting*. Virtual.
- Wilterson S.A. & Taylor J.A. (October, 2019). Strategic compensation in mirror-reversal adaptation tasks. *The Society for Neuroscience Annual Meeting*. Chicago, IL.
- Langsdorf L., Schween R., Taylor J.A., & Hegele M. (October, 2019). Dimension of distality: Body-, tool-, and effect-related separations motor memories. *The Society for Neuroscience Annual Meeting*. Chicago, IL.
- The Avraham G., Taylor J.A., Ivry R.B., & McDougle S.D. (April, 2019). Classical conditioning effects in human visuomotor adaptation. *The Society for the Neural Control Movement Annual Meeting*. Toyama, Japan.
- Campagnoli C., & Taylor J.A. (April, 2019). Mechanical transparency guides the selection of internal models. *The Society for the Neural Control Movement Annual Meeting*. Toyama, Japan.
- Hutter S.A., & Taylor J.A. (April, 2019). The long-term shortfalls of implicit sensorimotor adaptation. *The Society for the Neural Control Movement Annual Meeting*. Toyama, Japan.
- Hutter S.A., McDougle S.D., & Taylor J.A. (April, 2019). Generalizability of a novel feedback controller is computationally demanding and sensitive to prior knowledge. *The Society for the Neural Control Movement Annual Meeting*. Toyama, Japan.
- Poh E., & Taylor J.A. (April, 2019). Sensory-prediction errors drive both motor adaptation and perceptual recalibration. *The Society for the Neural Control Movement Annual Meeting*. Toyama, Japan.
- Campagnoli C., & Taylor J.A. (November, 2018). Perception and visuomotor adaptation share the same psychological space. *The Society for Neuroscience Annual Meeting*. San Diego, CA.
- Hutter S.A., & Taylor J.A. (November, 2018). A newly learned controller is inflexible and computationally demanding. *The Society for Neuroscience Annual Meeting*. San Diego, CA.
- McDougle S.D., Parvin D.E., Butcher P.A., Mushtaq F., Niv Y., Ivry R.B., & Taylor J.A. (November, 2018). Striatal prediction errors in a decision-making task are modulated by action failures. *The Society for Neuroscience Annual Meeting*. San Diego, CA.
- Poh E., & Taylor J.A. (November, 2018). Distinct effects of motor adaptation and proprioceptive recalibration in visual error clamp tasks. *The Society for Neuroscience Annual Meeting*. San Diego, CA.

- Campagnoli C., & Taylor J.A. (August, 2018). Visuomotor adaptation is influenced by perceived depth. *European Conference on Visual Perception*, Trieste, Italy.
- Campagnoli C., & Taylor J.A. (May, 2018). Perceived depth modulates visuomotor adaptation. *The Society for the Neural Control Movement Annual Meeting*. Santa Fe, NM.
- Hutter S.A., McDougle S.D., & Taylor J.A. (May, 2018). Instruction impedes learning of a new controller. *The Society for the Neural Control Movement Annual Meeting*. Santa Fe, NM.
- Poh E., & Taylor J.A. (May, 2018). Evidence of mixed reference frame representations for both implicit and explicit learning in a visuomotor adaptation task. *The Society for the Neural Control Movement Annual Meeting*. Santa Fe, NM.
- Schween R., Taylor J.A., & Hegele M. (May, 2018). Aim-based generalization shapes local dual adaptation to opposing cursor rotations. *The Society for the Neural Control Movement Annual Meeting*. Santa Fe, NM.
- McDougle S.D., & Taylor J.A. (May, 2018). Parametric versus discrete working memory representations in sensorimotor learning. *The Society for the Neural Control Movement Annual Meeting*. Santa Fe, NM.

Talks & Colloquia

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| Advances in Motor Learning Symposium
Enschede, The Netherlands | 2022 |
| ITRG Brain in Action Seminar Series
Toronto, Canada | 2021 |
| Progress in Motor Control XIII
Auckland, New Zealand | 2021 |
| KAAP Seminar Series
University of Delaware | 2020 |
| BIRS Optimal Neuroethology of Movement and Motor Control
Banff International Research Station, Banff, Canada | 2019 |
| Psychology Seminar Series
New York University, Abu Dhabi, United Arab Emirates | 2019 |
| Institute of Cognitive Neuroscience Seminar
University College London, London, UK | 2019 |
| Perception, Cognition, and Action Seminar Series
University of Birmingham, Birmingham, UK | 2019 |
| Neuromechanics and Motor Control Meeting
Technical University of Munich and University of Giessen
Raitenhaslach, Germany | 2018 |
| Mind, Machine, and Motor Nexus, National Science Foundation
Point Reyes, CA | 2018 |
| Summer Institute in Cognitive Neuroscience
Lake Tahoe, CA | 2018 |

The Society for Neuroscience Annual Meeting Washington, D.C.	2017
Computational Cognitive Neuro-Psychiatry Seminar, Rutgers University, Piscataway, NJ	2017
Perception and Action Seminar Brown University, Providence, RI	2016
Neuromotor Control Laboratory Harvard University, Cambridge, MA	2016
The Annual Meeting of New Champions, World Economic Forum Tianjin, China	2016
Symposium on The Cognitive and Neural Architecture of Sensorimotor Behaviors, Society for the Neural Control of Movement Montego Bay, Jamaica	2016
Department of Rehabilitation & Movement Science Colloquia Rutgers University, Newark, NJ.	2014
Cognitive Computational and Systems Neuroscience Program Colloquia Washington University in St. Louis, St. Louis, MO	2014
Northwestern Sensory Motor Performance Program Colloquia Rehabilitation Institute of Chicago, Chicago, IL	2014
Movement Disorders Division Colloquia, Columbia Medical Center Columbia University, New York, NY	2014
Tenth Computational Motor Control Workshop Ben Gurion University, Israel	2014
Symposium on Human Learning: Feedback, Reinforcement, and Reward Society for Neuroscience Annual Meeting. San Diego, CA	2013
Brain, Learning, Animation, and Movement Lab, Dept. of Neurology Johns Hopkins University, Baltimore, MD	2013
Department of Biomedical Engineering Colloquia Washington University in St. Louis, St. Louis, MO	2013
Center for the Translational Neuroscience of Alcoholism Colloquia Yale University, New Haven, CT	2012
Moss Rehabilitation Research Institute, Elkins Park, PA	2012
OMNI, Veterans Administration Clinic, Martinez, CA	2012
International Computer Science Institute, Berkeley, CA	2010

Mentoring

Postdoctoral Fellows

Olivia Kim	2020-
Carlo Campagnoli Lecturer at the University of Leeds, UK	2017-2021

Eugene Poh Lecturer at the Macquarie University, Australia	2016-2018
Peter Butcher Principal Data scientist, Comcast Labs, Los Angeles, CA	2013-2017

Graduate Students

Jonathan Daniels, Primary Advisor	2021-
Carlos Velazquez Vargas, Primary Advisor	2019-
Sarah Wilterson, Primary Advisor Data Scientist, Visa.	2016-2021
Andrew Wilterson, Secondary Advisor, Product Development Manager, Chadwick Martin Bailey	2016-2020
Samuel McDougle, Primary Advisor Assistant Professor at Yale University	2013-2018
Judith Fan, Secondary Advisor Assistant Professor at UC San Diego, CA	2012-2016
Jonathan Berliner, Secondary Advisor Consultant, New York, NY	2012-2015
Clarice Robenalt, Secondary Advisor Infer Inc., Mountain View, CA	2012-2014

Research Assistants & Associates

Chandra Greenberg	2017-2022
Kristy Snyder Associate director at C3 Research, Lake Mary, FL.	2016-2017
Alyssa Bangel Graduate student at the University of the Sciences in Philadelphia	2014-2015
Priya Mans Undergraduate at The College of New Jersey	2014-2015
Nikhit Kethidi Undergraduate at Rutgers University	2013-2015
Krista Bond Graduate student at Carnegie Mellon University	2013-2017
Samuel Brudner Graduate student at Duke University	2012-2014

Dissertation Defense Committees

Abigail Novick Hoskin, Psychology, Oral Committee	2022
Sarah Wilterson, Psychology, Reading and Oral Committee	2021
Samatha Floyd, Psychology, Reading Committee	2021
Andrew Wilterson, Psychology, Reading Committee	2020
Brandy Briones, Psychology, Reading Committee	2020

Felicia Zhang, Psychology, Reading Committee	2020
Clare Choi, Psychology, Oral Committee	2019
Benjamin Deverett, Neuroscience, Reading Committee	2019
Nathan Parker, Neuroscience, Reading Committee	2019
Sherry Wu, Psychology, Reading Committee	2019
Thomas Pisano, Neuroscience, Oral Committee	2019
Evan Cesanek, Brown University, External Reader	2019
Joel Finkelstein, Psychology, Reading Committee	2018
Gary Kane, Psychology, Oral Committee	2018
Samuel McDougle, Psychology, Reading and Oral Committee	2018
Taylor Webb, Psychology, Reading Committee	2018
Natalia Cordova, Princeton Neuroscience Institute, Committee	2017
Mathew Yarrosi, Rehab & Movement Sciences, Rutgers University	2017
Jeremy Borjon, Psychology, Reading Committee	2017
Judith Fan, Psychology, Reading Committee	2016
Andra Geana, Psychology, Reading Committee	2015
Darshana Narayan, Psychology, Reading Committee	2015
Kathi Seidl-Rathopf, Psychology, Oral Committee	2015
Brooke MacNamara, Psychology Reading Committee	2014
Jeffery Meirer, Psychology, Oral Committee	2014
Anna Schapiro, Psychology, Oral Committee	2014
Alec Solway, 2014, Princeton Neuroscience Institute, Committee	2014
Deborah Holoien, Psychology, Oral Committee	2013
Matthew Johnson, Psychology, Oral Committee	2013
Jonathan White, Psychology, Reading Committee	2013
<i>Dissertation Proposal Committees</i>	
Abdul-Rahim Deeb, Cognitive Linguistic & Psychological Sciences	2021
Sarah Wilterson, Psychology	2020
Andrew Wilterson, Psychology	2020
Ben Deverret, Princeton Neuroscience Institute	2017
Samuel McDougle, Psychology	2017
Mathew Yarrosi, Rehab & Movement Sciences, Rutgers University	2016
Nathan Parker, Princeton Neuroscience Institute	2016
Judith Fan, Psychology	2014
<i>General Exam Committees</i>	
Carlos Velazquez Vargas, Psychology	2021

Andrew Wilson, Psychology	2019
Sarah Hutter, Psychology	2018
Mike Morais, Neuroscience	2018
Jonathan Berliner, Psychology	2017
Jeremy Borjon, Psychology	2014
Samuel McDougale, Psychology	2014
Clarice Robenalt, Psychology	2014
Taylor Webb, Psychology	2014
Judith Fan, Psychology	2013

Senior Theses

Naser Al-Fawakhiri, Psychology	2022
Thea Diampeles, Psychology	2021
Kasey Bowyer, Neuroscience	2021
Patrick D'Arcy, Psychology	2020
Barbara Gruszka, Neuroscience	2020
Logan MacDonnell, Psychology	2020
Stephen Craig, Neuroscience	2019
Stephen Chen, Psychology	2019
Kyle Lang, Psychology	2019
Erin Berl, Psychology	2017
Chris Chang, Psychology	2017
Elizabeth Maine, Psychology	2016
Rachel Newman, Psychology	2016
Sara Ronde, Psychology	2016
Andre Belarmino, Psychology	2015
Tyler Osborne, Psychology	2015
Trocon Davis, Psychology	2014
Caroline Franke, Psychology	2014
Jordan Metro, Psychology	2014

Teaching

Cognitive Psychology (PSY255)	S2015, F2015, S2018, F2018, F2019, F2022
From Molecules to Systems to Behavior (NEU502)	S2015-S2020
Proseminar: Cognitive Psychology, (PSY501)	F2013, F2015, F2017, F2019
Research Seminar in Cognitive Psychology (PSY543)	F2013, S2014
Motor Control and Learning (PSY412/NEU412)	S2013, S2014

University Service

Princeton University Committee on Discipline	2019-
Princeton University Internal Review Board Member	2019-
George Miller Memorial Prize Committee	2017, 2021
Princeton Alumni Association, Montreal Chapter	2017
Princeton Ideas Lab, World Economic Forum, Tianjin China	2016
Psychology Department Colloquium Committee Chair	2015-2020
Robotic and Intelligent Systems Program Committee	2015-
Academic-Athletic Fellow, Squash	2015-
Edward E. Jones Memorial Prize Committee	2015
Academic Adviser, Whitman College	2013-
Faculty Fellow, Whitman College	2013-
Academic-Athletic Fellow, Football	2013-
Research Mentor, Laboratory Learning Program	2013-
Faculty Adviser, Senior Thesis Writing Group	2013

Other Academic Service

Guest Reviewing Editor, eLife	2017
Associate Editor, The Journal of Cognitive Neuroscience	2016-
Research Domain Criteria Matrix Panel, National Institute of Mental Health	2016-2017
External Advisory Board Member for the Cognitive Computational System Neuroscience Pathway, Washington University in St. Louis	2014
National Science Foundation, Proposal Review Panel	2017, 2019
National Science Foundation Graduate Research Fellowship Panelist	2016
Editorial Board, Frontiers in Human Neuroscience	2012-

Ad Hoc Reviewer, Granting Agencies

French National Research Agency, Israel Science Foundation, National Institutes of Health, National Science Foundation, The Flanders Research Foundation (Fonds Wetenschappelijk Onderzoek), Wellcome Trust Senior Research Fellowships

Ad Hoc Reviewer, Journals

Attention, Perception, & Psychophysics, Behavioural Brain Research, Behavioral Neuroscience, Cell Reports, Cerebral Cortex, Cognitive, Affective, & Behavioral

Neuroscience, Cognitive Science, Consciousness and Cognition, Cosyne, Current Biology, Current Opinion in Biology, eLife, Experimental Brain Research, Frontiers in Human Neuroscience, Frontiers in Neuroscience, Frontiers in Psychiatry, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Human Perception & Performance, Journal of Experimental Psychology: Learning & Memory, Journal of Cognitive Neuroscience, Journal of Motor Behavior, Journal of Neurophysiology, Journal of Neuroscience, Motor Control & Motor Learning, Nature Communications, Nature Human Behavior, Neurobiology of Learning & Memory, Neuroimage, PLoS Computational Biology, PLoS One, Psychonomic Bulletin & Review, Scientific Reports, Proceedings of the National Academy of Science

Societies

American Physiological Society, Society for Neuroscience, The Neural Control of Movement Society, National Ataxia Foundation

Community Outreach

Guest Lecturer, Trenton Central High School AP Biology	2018
Lab Host, Science Mentors, Trenton Central High School	2016, 2017
Mentor, FIRST Robotics Competition Team 5666 Trenton STEM-to-Civics Charter High School	2016
Guest Lecturer, Princeton Adult School	2016
Guest Speaker, Pennsylvania Ataxia Support Group	2016
Guest Speaker, Robert Wood Johnson Parkinson's Disease Support Group	2015
Guest Speaker, STEM Club, New Brunswick High School	2014
Guest Speaker, Capital Health Parkinson's Disease Support Group	2014
Guest Speaker, New Jersey Ataxia Support Group	2014
Guest Speaker, Beth Israel Ataxia Support Group	2012, 2014